



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,998	03/30/2004	Ruey J. Yu	BMR-001/C2	2680
70813 7590 02/20/2008 GOODWIN PROCTER LLP 901 NEW YORK AVENUE, N.W. WASHINGTON, DC 20001				
EXAMINER SCHLENTZ, NATHAN W				
ART UNIT		PAPER NUMBER		
1616				
NOTIFICATION DATE		DELIVERY MODE		
02/20/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

AAlpha-Kpetewama@goodwinprocter.com

bhenry@goodwinprocter.com

patentdc@goodwinprocter.com

Office Action Summary

Application No.

10/811,998

Applicant(s)

YU ET AL.

Examiner

NATHAN W. SCHLIENTZ

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 111-121, 149, 152 and 159-161 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

Claims 111-121, 149, 152 and 159-161 are pending. Claims 111, 149, 152 and 159-161 have been amended in an amendment filed 19 December 2007. Claims 111-121, 149, 152 and 159-161 are examined herein on the merits for patentability.

Terminal Disclaimer

The terminal disclaimer filed on 29 October 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent Nos. 6,335,023 and 6,740,327 has been received. The rejection of claims 111-121, 149-151 and 159-161 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8 and 14 of U.S. 5,942,250 and claims 1-7, 20-26, 29-30, 43-49 and 52-56 of U.S. 6,335,023 is maintained pending the approval of the aforementioned Terminal Disclaimer. Upon approval of the TD, the rejection will be withdrawn by the examiner.

Withdrawn Rejections

1. The rejection of claims 111-121, 149, 152 and 159-161 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is hereby withdrawn by the examiner in light of the amendment to claims 111, 149 and 159-161, wherein

Art Unit: 1616

Applicants deleted "saturated or unsaturated, stereoisomeric or non-stereoisomeric, straight or branched chain" forms thereof.

2. The rejection of claim 152 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is hereby withdrawn by the examiner in light of the amendment to claim 152, wherein Applicants deleted "other oxidative damages to the skin, hair, and nails."

New Grounds of Rejections

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1616

1. Claims 111-121, 149, 152 and 159-161 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 22, 35, 36 and 56 of copending Application No. 10/792,273. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to a composition comprising an aldobionic acid and a pharmaceutically active drug. Many of the aldobionic acids are overlapping in scope, and some are exactly the same (i.e. isolactobionic acid, isomaltobionic acid, cellobionic acid, gentiobionic acid, kojibionic acid, laminaribionic acid, melibionic acid, nigerobionic acid, rutinobionic acid, sophorobionic acid, and lactone forms thereof). Therefore, the scopes of the instant claims overlap and thus they are obvious variants of one another.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

If the instant claims are found allowable, the rejection will be withdrawn by the examiner and the application will be permitted to issue as a patent, pursuant to MPEP 804(I)(B)(1):

If a "provisional" nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 111-115, 149 and 152 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,137,397 (Dutta et al.).

Dutta et al. disclose a process for the preparation of Erythromycin aldobionates, such as Erythromycin Cellobionate and Erythromycin Mellibionate, comprising converting an alkali metal salt of aldobionic acid into free aldobionic acid by passing through cationic exchangers, neutralizing the obtained aldobionic acid with Erythromycin base and recovering the Erythromycin aldobionate (Abstract; col. 1, ll. 44-52; col. 2, ll. 8-31; and claims 2 and 3). Dutta et al. further disclose that Erythromycin is an antibiotic that has been successfully used in the treatment of a variety of bacterial infections (col. 1, ll. 5-7). Therefore, Dutta et al. clearly disclose a composition comprising a salt of cellobionic acid, cellobionate, and Erythromycin.

It is noted that the recitation of the intended use “wherein the antioxidant composition is used for the prevention and/or treatment against damage from radiation, ionizing radiation, free radicals, or laser” has not been given patentable weight to distinguish over Dutta et al. because the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art

structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Since Dutta et al. disclose compositions that are the same as those claimed, they would be capable of performing the intended use, as claimed.

2. Claims 111, 112, 149 and 152 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,714,598 (Toce).

Toce discloses a method for producing sulfated bis-cellobionic acid propylamide by first producing cellobionic acid from cellobiose, refluxing in 300 ml of methoxyethanol:pentane (2:1) and 0.2 ml acetic acid, reacted with 1,3-diaminopropane, and finally reacted with sulfurtrioxide-pyridine complex (Examples 1, 2 and 4). Therefore, Toce discloses a composition comprising approximately 4 wt.% cellobionic acid in 300 ml of methoxyethanol:pentane (2:1) and 0.2 ml acetic acid, which anticipates the instant claims of a composition comprising an aldobionic acid.

It is noted that the recitation of the intended use "wherein the antioxidant composition is used for the prevention and/or treatment against damage from radiation, ionizing radiation, free radicals, or laser" has not been given patentable weight to distinguish over Toce because the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Since Toce

discloses compositions that are the same as those claimed, they would be capable of performing the intended use, as claimed.

3. Claims 111, 112, 149 and 152 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 95/05155 (Moczar et al.) (also published in English as U.S. Patent No. 5,910,490).

Moczar et al. disclose compositions for the treatment or prevention of the symptoms of connective tissue aging (Abstract). Moczar et al. further disclose melibiose and melibiononic acid (MBA) compositions for the effect on elastase activity (Example 5, Table 3; and Example 6). Therefore, Moczar et al. disclose compositions comprising melibiose or melibiononic acid, as instantly claimed.

It is noted that the recitation of the intended use “wherein the antioxidant composition is used for the prevention and/or treatment against damage from radiation, ionizing radiation, free radicals, or laser” has not been given patentable weight to distinguish over Moczar et al. because the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Since Moczar et al. disclose compositions that are the same as those claimed, they would be capable of performing the intended use, as claimed.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan W. Schlientz whose telephone number is 571-272-9924. The examiner can normally be reached on 8:30 AM to 5:00 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathan W. Schlientz
Patent Examiner
Technology Center 1600
Group Art Unit 1616

/Johann R. Richter/
Supervisory Patent Examiner, Art Unit 1616_____

Art Unit: 1616

Johann R. Richter
Supervisory Patent Examiner
Technology Center 1600
Group Art Unit 1616